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RESPONSE TO OFFICE ACTION SUMMARY

APPLICATION NUMBER: 09/902,318 APPLICANT: JUNGWIRTH, ET. AL EXAMINER: VINH P. NGUYEN

ART UNIT: 2829

'AGENT REFERENCE: M-568

TITLE: "APPARATUS FOR A SIMPLIFIED POWER DISTURBANCE INDICATOR GAGE WITH LEARNING CAPABILITY OPTIONS"

NOTE: THIS RESPONSE WAS ORIGINALLY DUE ON JUNE 23. 2003. DUE TO THE GRIEF CAUSED BY MY WIFE'S UNTIMELY DEATH, I WAS UNABLE TO COMPLETE THIS WORK ON TIME, A ONE MONTH EXTENSION WAS REQUESTED, AND A CHECK AND THE NECESSARY FORMS WERE INCLUDED IN MY TIMELY RESPONSE. THESE DOCUMENTS ARE THE RESPONSE TO THE ORIGINAL OFFICE ACTION.

Included herein are the changes and additions requested by the examiner, and the specified patent application 09/902,318, is now in condition for publication and approval. All objections and prior art citations have been traversed,

The following objections were cited by the examiner:

- 1. The examiner has objected to the phraseology used in the abstract, "the present invention" citing Par. 608(b) in the MPEP. The examiner is correct, and the subject terminology in the abstract have been deleted.
- 2. The examiner has rejected claims 1-10 under 35USC 112, as being indefinite for failing to particularly point out the subject matter which the applicant regards as his invention.

Claim 1 is repeated here: 1. We claim an apparatus for a simplified <u>electrical power</u> disturbance detection and indicator gage with learning capability options, wherein said gage comprises a two-part apparatus, a plurality of alpha-numeric displays, a plurality of light emitting diode indicators, a plurality of bar graph displays, a plurality of switches, multiple input terminals, interconnecting cable and associated connectors, a means for connection to a single phase or polyphase power mains, for determining the existence and duration, or non-existence of specific power line

anomalies which affect the operation or process of connected electronic devices, and a means for memorizing the indicated anomalies from previous measured values, without the need for complicated graphs or analysis by experienced technicians or engineering professionals.

This claim clearly defines the device to be patented as a simplified disturbance detection device. The term "electrical power" has been added to further exemplify the use of the gage. The terminology "electrical power" is supported on page 2 of the specification, line 12 This small addition, previously implied, helps to clarify what the inventor considers as his invention.

The objection to the claims is thereby traversed.

The examiner says that it is not clear what is meant by "a two part apparatus" and a plurality of alphanumeric displays" and asks if these are shown in any drawings.

Response/ traverse:

The two part apparatus was illustrated in figure 1, previously supplied, and included here for your convenience, and was described in the initial specification, under the discussion of Figure 1. The specification, with some typos corrected and updated, but no new material has been added, is included herein for the examiner's convenience. Note the term "unit" has been deleted and replaced by "module". The meaning of the involved sentence is unchanged, but the term "module" is clearer than "unit".

The examiner further states that "weather proof connectors" is unclear. The connectors are illustrated in Figure 1, as items 3 qnd 5, and are clearer in the supplemented drawing, figure 7. Where the same identifying numbers are used.

Connectors are well known to those people who practice the engineering arts. Connectors join cables to other cables, they join cables to modules, and make connection between other devices. There are many different types of connectors, from simple cheap ones to more expensive rugged and sealed connectors. Weather proof connectors contain seals which prevent water and dirt from entering the connector. A particular brand of connector has not been specified, for doing so would unnecessarily narrow the scope of the patent. Any connector that is "weather proof" and can carry the necessary voltages and currents may be used, and is the designers responsibility to select the correct connector for the application.

the examiner goes on to say that in claim 6, "it is unclear what a light emitting diode bar graph represent."

Response/traverse:

A bar graph may be used either horizontally or vertically. Much like a "thermometer" the

bar graph may be used to represent either an analog or digital magnitude of an event. There are many different manufacturers and styles of Bar Graphs, with many different characteristics. A particular brand of Bar Graph has not been specified, for doing so would unnecessarily narrow the scope of the patent. The selection of a bar graph for a specific application is a design function. Environment, color, range, and size may dictate the design.

The examiner indicates that the claim 10 has no antecedent basis. Note that pages 25, 26, and 27 of the specification describe the learning function of the claimed instrument, and claim 1 describes the instrument as having learning capability. What more is needed?

The examiner indicated that the term "we claim" which appears in all claims should be deleted. I have Complied with that request. Claims are indicated as amended.

Claims 1-3 are rejected under 35USC 192(e) as being anticipated by Wilfong U.S. Pat 6,404,348 B1, Issued June 11, 2002.

Response/ Traverse:

I have read and understood the referenced patent. I am qualified to comprehend this device; I am a registered patent agent, a graduate electrical engineer, a registered professional electrical engineer, and I have forty years of experience designing and building electronic equipment. I have worked in the power protection industry for ten years, and have authored many documents and specifications that industry..

The referenced patent was issued on June 11, 2002, We filed this patent application on July 10, 2001. With no association with the company indicated in the Wilfong patent. (we had no idea that they were developing a somewhat similar instrument to what is presented herein.) I have documentation from the company that developed this device indicating the concept was originated in January 1998 and there had been due dilligence in developing the concepts and circuitry from that date to the date of filing date, 7/10/01, when the concepts and circuits were proven to be workable.

The Wilfong patent, though similar, is more complicated, and very difficult to use and understand. The salient feature of the patent applied for (byJungwirth et al) is the simplicity and the lack of training required to use and understand the results of the electrical power measurements. While both systems are "modular" and they measure power line disturbances, there the similarity diverges, and the devices no longer are similar. We believe the Wilfong patent. by virtue of its content and filing does not represent a true prior art reference, and should not be used to affect the viability of the patent applied for. Both gages aew remarkably different.

The second patent for examination was provided by the examiner. This is US patent No, 4,362, 986, by Burke at al, Issued December 7, 1982. This patent describes a means for monitoring voltage and current faults in an electric power system. This application which was filed on October 14, 1980 predates our work by approximately eighteen years. Since that time, there have been large improvements in the available technology, and the resulting product has many features and functions not conceived by Burke et al. For example, the Burke patent does not have any learning features and no dynamic memory. instead, the operator enters the expected transient levels into the gage by the means of manually operated thumb-wheels. Comparison is made electronically in comparators. The reference is fixed. This burke patent, though technically interesting does not conflict with the Jungwirth application, which is fully automatic, requires no input (other than the selection of voltage, and type of electricity i.e. single phase or polyphase) by the operator.

Conclusion:

Incorporation of the corrections suggested by the examiner, and other additions, corrections, and explanations have traversed the objections made by the examiner have corrected any and all known errors or areas of confusion..

Figures 7 and 8 have been included herein as information required to answer the examiners questions, These figures are not necessary for inclusion in the original specification. Deletions in the specification are shown in brackets, [xx] and additions are underlined. \underline{xxxx} .

Although this invention has been shown and described with respect to detailed embodiments thereof, it will be appreciated and understood by those skilled in the art that various changes in form and detail thereof may be made without departing from the spirit and scope of the claimed invention.

The information provided herein should clarify and correct any issues that have arisen and the application should be in condition for allowance.

Respectfully submitted,

Murray Leonard

Registered Patent Agent,

Reg. No, 39, 515